

a positioning device configured to obtain and transmit positioning data relating to the position of the respective racecar at any time during the race, and at any location on the racetrack; and

a transmitter configured to transmit the positioning data;

a central unit equipped with at least one receiver and configured to receive the transmitted positioning data;

a memory configured to store track data of the racetrack; and

a calculation device configured to calculate positions of the racecars on the racetrack from the received positioning data of the respective racecars and the stored track data.

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17. (New) A positioning system for a first plurality of racecars on a racetrack comprising:

a first vehicle-information device provided in each of the first plurality of racecars, each first vehicle-information device comprising a transmitter configured to transmit direction-finding signals;

at least three direction-finding receivers configured to obtain and route positioning data from the transmitted direction-finding signals, which can be used to determine the position of a respective racecar at any time during the race, and at any location on the racetrack;

a central unit equipped with a memory configured to store track data of the racetrack; and

a calculation device configured to calculate positions of the racecars on the racetrack from the routed positioning data of the respective racecars and from the stored track data.

18. (New) The positioning system according to Claim 17, further comprising:

a second plurality of racecars, each containing a second vehicle-information device, each second vehicle-information device comprising:

a positioning device configured to obtain and transmit positioning data that can be used to determine the position of the respective racecar; and
a transmitter configured to transmit the positioning data;

wherein the central unit is further equipped with at least one receiver configured to receive the transmitted positioning data, and

21 wherein the calculation device is further configured to calculate the position of the second plurality of racecars on the racetrack from the received positioning data from the respective second plurality of racecars and from the stored track data.

19. (New) The positioning system according to Claim 18, wherein the first and second plurality of racecars wholly or partially correspond.

20. (New) The positioning system according to Claim 16, wherein at least one of the positioning devices obtains the positioning data from at least one of a receiver of satellite-supported positioning data, a direction-finding receiver, and a gyro sensor.

21. (New) The positioning system according to Claim 16, wherein at least one of the racecars includes at least one device configured to obtain vehicle operating data or positioning data, transmitted by its respective vehicle-information device to the central unit.

22. (New) The positioning system according to Claim 21, wherein the positioning and operating data is configured to be wholly or partially encrypted when transmitted.

23. (New) The positioning system according to Claim 16, wherein the central unit further includes a transmitter configured to transmit safety information; and

at least one of the racecars includes a receiver configured to receive the safety information from the central unit and a display configured to display a warning using the safety information.

24. (New) The positioning system according to Claim 16, further comprising plural section monitors, wherein at least one of the section monitors is equipped with a receiver configured to receive safety data from the central unit, and a display configured to display a warning using the safety information.

25. (New) The positioning system according to Claim 24, wherein, in an event of a stopped vehicle, the safety data is sent from the central unit, which enables displaying a warning in the section monitors located at a given section of the track.

26. (New) The positioning system according to Claim 23, wherein the safety information can be determined from at least one of the calculated position and the operating data of the at least one of the racecars.

27. (New) The positioning system according to Claim 16, further comprising a display device configured to visually display a current position of one or more racecars on the racetrack using the track data and the vehicle positions.

28. (New) The positioning system according to Claim 16, further comprising a data-processing device configured to edit selected racing information contained in the positioning system and feed the selected racing information to a network such that a display of the racing data is possible with visual data-processing devices networked by the data-processing device.

29. (New) The positioning system according to Claim 28, wherein the data-processing device and the visual data-processing devices are networked by the Internet.

30. (New) The positioning system according to Claim 28, wherein the data-processing device permits an interactive selection of the respective racing information to be